Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-50 (canceled)

Claim 51 (previously presented): A method for obtaining a culture of human neural precursor cells capable of differentiating into neurons and glia comprising:

a) culturing at least one neural precursor cell in a medium including a first mitogen selected from the group consisting of aFGF, bFGF, EGF, TGFα and combinations thereof;

b) introducing into the neural precursor cell in the medium including the first mitogen a recombinant DNA construct comprising a receptor ligand-regulated *c-myc* cDNA, wherein *c-myc* cDNA is fused with DNA encoding a ligand-binding domain of a nuclear receptor; and

c) expanding the neural precursor cell including the *c-myc* construct beyond thirty cell doublings prior to differentiation of said cell, wherein said expansion occurs in a medium containing the first mitogen and a second mitogen,

wherein said second mitogen is selected from the group consisting of aFGF, bFGF, EGF, TGFα, serum and combinations thereof, and

wherein said medium comprising the first mitogen and the second mitogen further comprises an amount of a *c-myc*-activating agent sufficient to maintain a stable cell line, wherein said *c-myc*-activating agent is capable of binding to the ligand-binding domain of said nuclear receptor.

Claim 52-53 (canceled)

Claim 54 (previously presented): The method of claim 51, wherein the neural precursor cell is derived from pluripotent embryonic stem cells.

Claim 55 (previously presented): The method of claim 51, wherein the neural precursor cell is derived from central nervous system tissue.

Claim 56 (previously presented): The method of claim 51, wherein the central nervous system tissue is selected from the group consisting of hippocampus, cerebral cortex, striatum, septum, hindbrain, and spinal cord.

Claim 57 (canceled):

Claim 58 (previously presented): The method of claim 51, wherein the second mitogen is different from the first mitogen.

Claim 59 (previously presented): The method of claim 51, wherein the nuclear receptor is selected from the group consisting of an estrogen receptor, an androgen receptor, a progesterone receptor, a glucocorticoid receptor, a thyroid hormone receptor, a retinoid receptor, and an ecdysone receptor.

Claim 60 (previously presented): The method of claim 51, wherein the *c-myc*-activating agent is selected from the group consisting of β-estradiol, RU38486, dexamethasone, thyroid hormones, retinoids, and ecdysone.

Claim 61 (previously presented): The method of Claim 51, further comprising introducing a selectable marker into the neural precursor cell.

Claim 62 (previously presented): The method of Claim 51, further comprising culturing the neural precursor cell in the presence of feeder cells.

Claim 63 (previously presented): The method of Claim 62, wherein the feeder cells are selected from the group consisting of unmodified primary stem cells, immature glial cells, mature astrocytes, fibroblasts, neurons and mitotically-inhibited cells.

Claim 64 (currently amended): A method of maintaining the capacity of a neural precursor cell line of a human to differentiate into neurons *in vitro*, wherein said cell line includes neural precursor cells capable of differentiating into neurons and glia, said method comprising:

a) preparing a culture comprising at least one neural precursor cell from said neural precursor cell line, wherein said culture includes at least one mitogen selected from the group consisting of aFGF, bFGF, EGF, TGFα and combinations thereof;

b) introducing into said neural precursor cell a recombinant DNA construct comprising a receptor ligand-regulated *c-myc* cDNA ~~to express~~capable of expressing a chimeric *c-myc* protein ~~comprising a *c-myc* protein~~ fused with at least one nuclear receptor protein having a *c-myc*-activating ligand binding domain; and

c) expanding the undifferentiated modified neural precursor cell beyond thirty cell doublings in a medium comprising said mitogen and an amount of a *c-myc*-activating agent.

Claim 65 (canceled)

Claim 66 (previously presented): The method of claim 64, wherein the neural precursor cell is derived from central nervous system tissue.

Claim 67 (previously presented): The method of claim 66, wherein the central nervous system tissue is selected from the group consisting of hippocampus, cerebral cortex, striatum, septum, hindbrain, and spinal cord.

Claim 68 (canceled)

Claim 69 (previously presented): The method of Claim 64, wherein the nuclear receptor protein is selected from the group consisting of an estrogen receptor, an androgen receptor, a progesterone receptor, a glucocorticoid receptor, a thyroid hormone receptor, a retinoid receptor, and an ecdysone receptor

Claim 70 (previously presented): The method of Claim 64, wherein the *c-myc*-activating agent is selected from the group consisting of β-estradiol, RU38486, dexamethasone, thyroid hormones, retinoids, and ecdysone.

Claims 71 – 80 (canceled)

Claim 81 (previously presented): The method of Claim 51, wherein the neural precursor cell is a cell of a clonal cell line.

Claim 82 (previously presented): The method of Claim 64, wherein said neural precursor cell line is a clonal cell line.

Claim 83 (previously presented): The method of Claim 51, wherein the neural precursor cell is capable of differentiating into a neuron upon withdrawing the mitogen and the *c-myc* activating agent.

Claim 84 (currently amended): The method of Claim 64 ~~further comprising,~~ wherein the neural precursor cell is capable of differentiating into a neuron upon withdrawing the mitogen and the *c-myc* activity agent.